Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

Faculty of Natural Resources and
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Hydro Politics and Interprovincial Relations in Pakistan

- A Case Study of the Kalabagh Dam Controversy

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ABSTRACT

Water has vital importance in all aspects of human life. It is a key natural resource for any country. The demand for water is increasing due to population growth and poor water management. Many countries meet the demand for water by building reservoirs for water storage. The construction of reservoirs however, may provoke conflicts over water resources between the government and other involved stakeholders in these projects. Moreover, these water conflicts may escalate further if the stakeholders already have a history of conflict on the distribution of other available resources.

This is a study of politics of water resource management. Empirically, the study focuses on the conflict over the Kalabagh Dam project in Pakistan. The purpose of the study is to explore why there is a continuous conflict between the concerned provinces over the construction of the KBD project. There is a considerable resistance against this project in the smaller provinces despite the increasing demand of water and electricity in the country. The study analyzes that the disputes over the allocation of water from other available resources, distribution of National Finance Commission Awards and resettlement of displaced people from Tarbela Dam Project in the past have further aggravated the KBD conflict. Moreover, ethno-regional politics is hindering the process of communication and a cause of diminishing trust among stakeholders. There is a need to reactivate the Council of Common Interests and improve the functioning of Indus River System Authority in order to manage the KBD conflict.

Keywords: *Kalabagh project, Provincial disputes, Federal government, Hydro politics*

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Abbreviations

CCI	Council of Common Interests
IRSA	Indus River System Authority
KBD	Kalabagh Dam Project
KPK	Khyber Pakhtukhwa Province
MLN	Muslim League Nawaz
NFC	National Finance Commission
PPP	Pakistan People's Party
TDP	Tarbela Dam Project
WAPDA	Water and Power Development Authority
WRPO	Water Resources Planning Organization

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1. Introduction

1.0.Introduction

Water has vital importance in all aspects of human life. It is a key natural resource for any country. The demand for water is increasing due to population growth and poor water management (UN Water Development Report, 2009). All countries meet the demand for water by building reservoirs for water storage**.** The construction of reservoirs however, may provoke conflict over water resources between the government and other involved stakeholders in these projects.

Natural resources are not the only reason for the emergence of conflict. As Collier (2007) described, natural resources are not the sole source of conflict and they do not make conflict inevitable. There may be other factors that can contribute to any particular conflict situation. For example, feelings of ethnic and political marginalization in any particular community may evolve a new conflict orescalate the on-going conflict over the natural resources of that area.

Many countries in the world are involved in water conflicts. More than 50 countries in five continents might soon be caught up in water disputes unless they move quickly to establish agreements on how to share reservoirs and rivers (Yaldram, 2009)**.** Water disputes between states bring regional tensions, delay economic development and activate the risks of causing more conflicts. Many scholars believe that intensified water scarcity will bring people to fight over their resources. Water as a renewable resource will be a major source of conflict in 21st century (Marquet, 2011).

South Asia is one of the regions where water conflicts between and inside the nations are at its peak. During the British colonization of the area, there were water disputes among and between provinces and the princely states. The partitioning of the country (into what are now India, Pakistan and Bangladesh) resulted in redrawing of the political boundaries, giving rise to new disputes over water rights. Pakistan and India have been involved in a water conflict over the Indus basin since the end of British colonization of the Indo-Pak (Verghese, 1997).

According to Elhance (1997) hydro politics is a systematic study of conflict and cooperation between actors over water resources. The hydro politics can be observed between states that transcend national borders or among inter-states of a country. Hydro politics surrounding the Kalabagh dam project (KBD) is an example of hydro politics among intra-state actors.

The Indus River became Pakistani territory after the Indus Water Treaty which was established between India and Pakistan in 1960.It is the major source of water in Pakistan. The Indus River, with its tributaries, creates one of the largest water systems in the world. Its length is 2900 kilometers and it stretches from Himalayas to Arabian Sea. Major water reservoirs that have been built on Indus River are the Terbela and the Chasma (Ahmad, 1995).

The KBD project is a hydroelectric project, proposed by the government of Pakistan, which has been planned to be built on the Indus River. The Kalabagh consultants[1]were appointed in 1982, to produce the fully developed project proposals on the KBD (WAPDA Project Planning Report, 2007). The project team was asked to complete the detailed design and contract documents in preparation for the implementation stage. This project was supposed to be implemented with assistance from the United Nations Development Program, supervised by the World Bank, for the client Water and Power Development Authority of Pakistan (ibid.).When the proposal was published, different provincial governments started to oppose the project. In this way, the KBD Project has aroused controversy between different provincial governments and the federal government of Pakistan from the start and still no consensus has been reached for this proposed project.

1.1. Problem statement

The economy of Pakistan mainly depends on agriculture. It employs more than 45 percent of total work force. About 70 percent population lives in rural areas of the country. Pakistan is blessed with adequate surface and ground water resources. These resources are major input for the agriculture of the country. . However, increase in urbanization, population and mismanagement has created high stress on available water resources. Currently, the country is facing water crisis owing to the huge gap between demand and supply of water. Moreover, the country mostly depends on hydro-power to produce cheap electricity. So, the less availability of water for the production of electricity has also given rise to electricity crisis. But the proposed solutions for these problems are not without controversy (PILDAT, 2011:9).

The KBD project was one of the solutions to get out of these problems but the solution itself has become a problem. This project has become politicized and also has generated inter-provincial conflict. According to Kaiser Bengali (2003) water scarcity is not just an issue of natural scarcity. It is socially generated scarcity as well. It is also the result of bad management policies. Despite of its

[1]A joint venture of five engineering firms, Binnie & Partners of UK, Harza Engineering Co. of USA, Mott Ewbank Preece Ltd. of UK, Associated Consulting Engineers & NESPAK of Pakistan

critical importance in Pakistan, political management of water resources like the KBD project has failed in the country.

So, it is very important to analyze the facts and responsible factors of provincial hydro-politics without any bias. If the differences between different stakeholders are not settled then ongoing water and power crisis in Pakistan will be further aggravated.

What intrigues me is to find out why Pakistan has been unable to move forward towards the construction of this project despite a dire need of new water resources in the country.

1.2.Research questions

The purpose of the study is to explore why there is a continuous conflict between the concerned provinces over the construction of the KBD project and how this conflict is articulated. Precisely, it seeks to answer the following questions;

I. What are the major interests and concerns of the different stakeholders of this project?
II. Which institutions are responsible for assessing, negotiating and administering the management of the KBD project and how have they acted in the ongoing conflict between the federal and provincial levels and between the provinces? Which are the actual outcomes of the aforementioned conflicts?
III. Is it possible to solve this conflict and, if that is the case, which measures ought to be taken so as to achieve this solution?

1.3. Methods and methodology

This study has been carried out by using a qualitative research method. Qualitative research method usually utilizes case studies, open ended survey responses, notes, photos and videos. They do not just rely on statistics or numbers, which is the sphere of quantitative researchers (Heath & Cowley, 2004). This study relies on secondary data collection and it has been done with the help of literature based on water conflicts and different reports, articles, documents and newspapers.

At first different stakeholders and their sources of communication with each other are identified by reviewing articles of various authors on the KBD project. Secondly, official websites and annual reports of the different federal and provincial government departments like Ministry of Water and Power, National finance Commission, Ministry of law & human rights and Election Commission of Pakistan are consulted in order to get the view point of different stakeholders. Moreover,

newspapers like, The Dawn, The News International, and The Kawish are used to observe the level of tension between stakeholders and their attempts of participation. The selected newspapers are widely circulated and are very attentive to the social issues of Pakistan. The selected sources helped in many ways to create a better understanding regarding the relation and interaction among stakeholders of the KBD project. It has also given the view point of local politicians and governmental institutions. In addition to this, relevant reports of various national and international organizations like Pakistan Engineering Congress, South Asia Water Forum, World Bank and UN annual reports have been studied in order to get a broader picture of the issue.

After the selection of material, it was placed into thematic areas in line with the objectives of the study and then it was analyzed to provide answers to the research questions with the help of relevant articles and theories. Hallgren's theory of social interaction (2003) was used to analyze the statements of different stakeholders and the nature of the KBD conflict.

Moreover, a historical analysis has been performed. Historical analysis is the study of past events which is commonly used in social science research for establishing a background of the study and to inform the possible outcomes and answers to current events and questions (Martha & Walter, 2001). At first step, the case background was examined; later an overview of the major social, political, and historical events that contributed to the KBD conflict and lead the actors towards the current stand-off position were identified and explained in the study.

The Comparative case studies of an Indian hydro project (cross national comparison) and the Tarbela Dam Project in Pakistan are also included in the study to have a deep exploration of the KBD issue. Comparative case studies exemplifies the reason of comparison which means that we can comprehend the society phenomenon in better ways when there is a comparison between two or more situations. The disadvantage of comparative cross-national method is that sometimes the researcher finds confronting situations while comparing the events of different countries with same parameters. The results of this comparison can be liked or disliked by these countries (Hantrias, 1996).

1.4. Limitations

Lack of resources prevented me to travel into the three provinces to conduct interviews with all the stakeholders of the KBD project. Moreover, many explanatory letters were required from different agencies to conduct field work especially in two provinces, as the law and order situation was not satisfactory in these areas. Stakeholders also have hostile political relations so the officials of

provincial governments were not interested to share important information in order to avoid problematic disturbances. Although one of the major limitations of this research was non-participation from different actors but efforts have been made to get pertinent and accurate information and view point of all the major stakeholders by using various online media sources. However, these kinds of sources are not always reliable and that they are biased, of course, by what each stakeholder wants to put forward as being the most relevant information. I also think that by conducting the field work and including a perspective focusing on local people's views would have enriched the study.

1.4. Thesis outline

This first chapter of the study has given a brief introduction to water conflicts in South Asia and hydro politics over the KBD project. Moreover, this chapter defined the research problem, the methods of the study and the research question.

Chapter two, "Theoretical Framework", describes the theories of conflict over natural resources. A critical discussion of these concepts is made to have a deep understanding of the conflict.

Chapter three of the study, "Background", gives a historical overview of hydro politics over Indus basin between India and Pakistan. This chapter also describes the interprovincial water politics over the KBD project.

Chapter four, "Stakeholders and their view point on the KBD project", describes the different stakeholders of the KBD project. It also explains about the political and administrative structure of federal and provincial governments. Moreover, it illuminates the power struggle and water dispute management institutions among the stakeholders. Furthermore, it describes the objections of different provincial governments and the view point of Water and Power Development Authority (WAPDA) over the KBD project.

Chapter five, "Analysis of Interprovincial Relations and their effect on the controversy of KBD project", gives a detailed picture of interprovincial relations in Pakistan. It also explains how the NFC Award controversy, ethnicity and the failure of water dispute resolution institutions affected the interprovincial relations and the KBD project. The case studies of the Tarbela Dam Project in Pakistan and Sardar Sarovar Project in India are being presented here in order to demonstrate the problematic side of other constructions of similar dam projects in the region.

Chapter six, “Conclusion”, concludes the study and provides future perspectives of the KBD project.

2. Theoretical Framework

Conflicts over natural resources are salient in contemporary world society and the issue has generated considerable interest within social sciences. Different views of various authors about the emergence and development of conflict are discussed in this chapter.

Different authors develop the definition of conflict in a different way. Conflict is generally perceived as a matter of opposing interests. According to Danial and Walker (2001) emergence of conflict is due to the incompatibility of the desires and goals of the stakeholders of any issue. Conflicts get more complicated when many different parties start showing their interest in the same issue.

According to Friedrich Glass (1999:16-19), when the interaction of differences, perceptions, feelings and will in another person’s behavior is perceived as restrictive then we call it a social conflict. He also claimed that the existence of difference is not the problem, as differences in themselves do not constitute conflict between people. What is important is how people handle their differences and how they experience them. He believed that the major cause of conflict is difficulty in dealing with change. Further he emphasized the need to help the people by developing their social skills to make them enable to deal with conflict situations by themselves, as far as possible. He also emphasized the need to develop “conflict capable attitude” in people. Once people become more ‘conflict capable’ they can make the organizations in which they are involved more ‘conflict resistant’ (Ibid).

Swain (2004) particularly talked about the emergence of conflict over water resources. He argued that difference in the perceptions of different stakeholders is the reason of this conflict. According to him, water resources can trigger conflicts between the state and its internal groups. The development of water resources by any state by building different kinds of infrastructure like dams, irrigation canals might be perceived by the local population against their interests. As a result, regional powers in that particular area (where new water resources are supposed to be built) may be activated and start challenging the actions of the state.

Adams et.al (2003:1916-17) described that conflict is often assumed to reflect differences in material interests between stakeholders. In such circumstances, conflict may be managed by attempting to reconcile multiple interests in resource management. But the origins of conflict may also go beyond material incompatibilities. They arise at a deeper cognitive level when stakeholders draw on their current knowledge and understanding to cognitively frame a specific natural resource management problem. Stakeholders often do not clearly recognize the ways in which their knowledge and understanding frame their perspectives on natural resource management. Hence, differences in knowledge, understanding and perceptions may provide a deeper explanation of conflict. It happens when different stakeholders make different interpretations of major issues of conflict. The knowledge which allows stakeholders to define the problems of resource use falls into three categories: knowledge of the empirical context; knowledge of laws and institutions; and beliefs, myths, and ideas. Stakeholders' knowledge of the empirical context derives from various sources. At the local level, knowledge may derive from direct personal experience, particularly from catastrophes such as droughts or floods. At larger scales, knowledge may be driven from the insights of formal empirical and theoretical research by official agencies and research organizations using censuses, or sample surveys (Ibid).

It can be concluded from the above discussion that these authors have a similar understanding of conflict, even though their emphases vary. Factors like incompatibility of interests, difference in perceptions and interpretations of other people's actions can be noticed as similar factors in all of these theories.

But according to Hallgren (2003:8) incompatibility in the interests of stakeholders is not solely responsible for a conflict. It is just a part of the picture. For example when two different actors make claims to a certain resource, it might have various outcomes depending on the interaction that takes place between them. It might result in a conflict or no conflict. Moreover, conflict might be solved out easily or it could escalate further. So, conflict is not only an outcome of opposing interest but social interaction is also a major factor. Therefore, it is essential to separate the two situations that "conflict is social interaction during which the actors trust to the interaction decreases" (Ibid). Furthermore, he distinguished the conflict from competition, interest divergence and goal differences. Conflict can be involved in the mentioned phenomenon, but conflict also adds a specific aspect to the situation. He argues that, misunderstanding in the process of communication leads toward misinterpretation of the actions of the other person. As a result, actors' interest in the situation starts to decrease. This is the emergence of social conflict.

Hallgren and Ljung (2005) stated numerous signs which indicate that the actor's trust in the interaction is decreasing during the communication process. The actors use various methods to change the situation like trying to withdraw from the interaction and communication process, different actors put more influence over the situation by preventing the other actors from having influence and they attempt to question credibility and legitimacy of each other. Furthermore, verbal attacks and physical violence can also be observed as a tool to change the situation. Thus, misinterpretations and misunderstandings are created among stakeholders and it becomes a cause of trust-diminishing interaction.

Hallgren (2003) also explained constructive methods that can be used in order to increase the trust during the communication process if conflict is caused by distrust in the interactive situation. He argues that conflict intervention is a specific task in natural resources management and the agencies responsible ought to offer communicative facilitation and conflict intervention. He also suggested that when the actors of common issues have different interests but have appropriate trust to communicate with each other then we should try to understand the differences and opportunities for common interest. Furthermore, in order to increase the trust during communication process, it is necessary to Meta-communicate (or communication about communication) which means to talk about the pre-conditions for communicating and how the actors relate to each other. Usually this is not an easy thing to practice during conflict. It might be perceived by others as yet another strategy to manipulate the situation so it also requires that the individual overcomes some of his distrust by showing some courage and will power. Moreover, help from professional facilitators could also be sought in order to ensure full participation of stakeholders and keep participants on track towards the creation of opportunities to increase the actors' trust in the process.

3. Case Background

3.1. The Indus Basin and its water disputes

This section of the study describes the location of Indus Basin and the dispute over it between India and Pakistan after the end of British colonization in 1947. It also explains the Indus Water Treaty, which divided the Indus Basin water between India and Pakistan.

The Indus Basin is the largest river basin in Asia with an approximate area of one million square kilometers. It is the major source of water in the region of India and Pakistan. It extends over four countries in South Asia including China in the north-east, India in the east, Afghanistan in the north-west and the vast majority of the plains of the Punjab, the Sindh and the KPK (Khyber Pakhtukhwa)

province in Pakistan. Fifty six percent of the Indus Basin is located in Pakistan and covers approximately 70 percent of the country area (Rehman & Kamal, 2005).

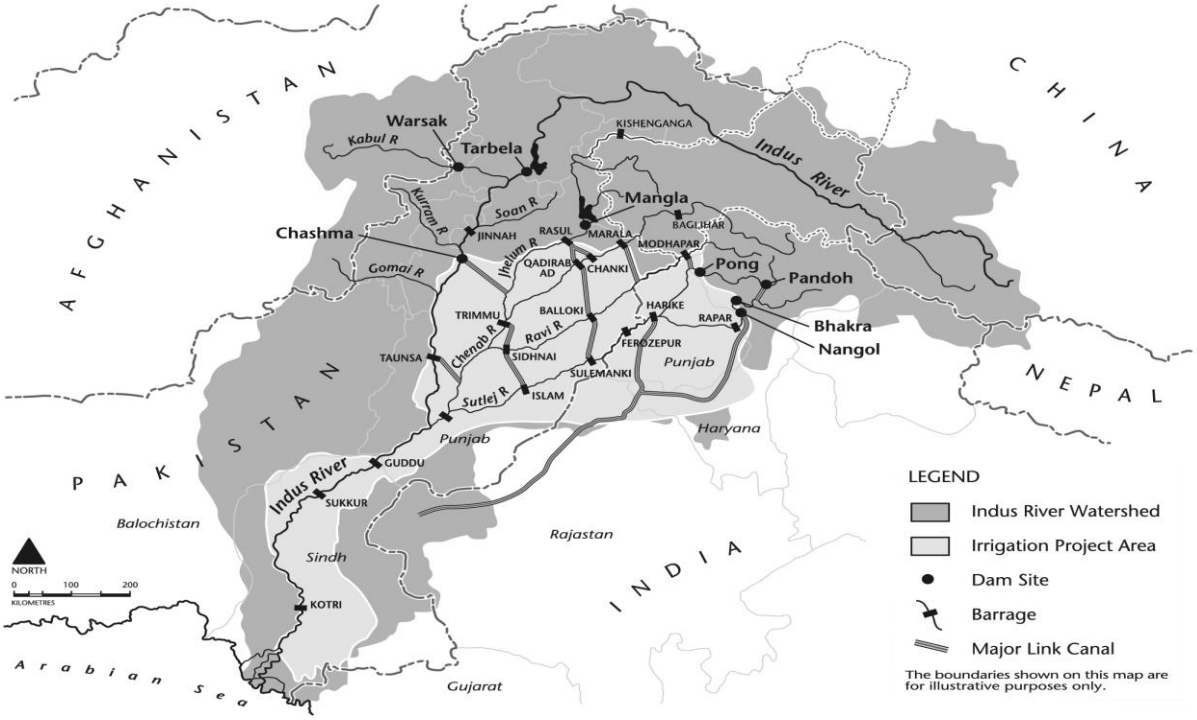

Figure1. The Indus Basin and its Major Water Resources

Source: USIP special report on "Hydro politics in Pakistan's Indus Basin", 2010.Available at: http://www.usip.org/files/resources/SR261%20-%20Hydropolitics_in_Pakistan's%20_Indus_Basin.pdf

The Indus System of rivers is comprised of three western rivers, the Indus, the Jhelum, the Chenab and three further eastern rivers the Sutlej, the Beas and the Ravi. The major contributor to the annual water flow for these rivers is snowmelt, originating in the Hindukush-Himalayan region. All of the Indus Basin Rivers pass through India before flowing into Pakistan.

The partition of India and Pakistan in 1947, created a conflict over the water share from Indus basin. The water of Indus River begins in the Himalayan state in the state of Jammu and Kashmir. The ownership of this state is disputed between India and Pakistan since 1947. Because of the dispute over political land boundaries, land which included the Indus River, both countries had been involved in a conflict since the conclusion of the Indus Water Treaty (Ibid).

3.2. The Indus Water Treaty

After the eight years of negotiations on Indus Basin water dispute, both the Governments of Pakistan and India came to an agreement and signed a water sharing treaty in 1960, named the Indus Water Treaty. It was signed with the help of the World Bank. This treaty divided the use of rivers between the two countries. Pakistan obtained exclusive rights for the three western rivers; the Indus, the Chenab and the Jehlum and India retained rights to the three eastern rivers; the Ravi, the Beas and the Sutluj (Ahmad, 2004).

According to Mustafa (2010:4) "after the Indus Water Treaty, the World Bank started massive aid programs in India and Pakistan to build up the storage and conveyance facilities and provide remedial water supplies for the flows that were supposedly lost to the other country".

3.3. Major hydropower projects in Pakistan

Most of Pakistan is situated in a dry region about fifty percent of the country is arid and forty percent is semi arid. Only ten percent of the country falls in humid category. The rainfall also varies from season to season and region to region. Agriculture is the backbone of the economy of Pakistan as 68 percent of the population of the country living in rural areas is directly or indirectly dependent on agriculture for their livelihood. Large part of the agriculture of the country depends on irrigation water which is supplied through the Indus River and its tributaries (Saleem, 2011).

Pakistan has two major water reservoirs and many small water reservoirs located in the different provinces of the country. Major water reservoirs are the Mangla and the Tarbela dam. The Mangla dam is located on the Jhelum River in the Mirpur District of Azad Kashmir, Pakistan. It was built in 1967 with funding from the World Bank (Myers, 1997). The Tarbela Dam is built on the Indus River. It is located in Haripur district in KPK province. The dam was completed in 1974 and was designed to store water from the Indus River for irrigation and hydroelectric power generation (Tate et.al, 2000). The reservoirs of the Mangla and the Tarbela play an important role in the economy of the country. Not only do they provide water for irrigation, but also help to generate cheap electricity. The Mangla and Tarbela reservoirs have power generating capacity of 1150 MW (mega watt) and 3500 MW, respectively. Since irrigation demand has the first priority on water released from the Tarbela and Mangla reservoirs, the production of energy from the power plants on these reservoirs occur either as a byproduct of irrigation water release or when surplus water for irrigation needs is available (ibid).

3.4. Water Distribution Accord

Both reservoirs (the Mangla and the Tarbela) were causes of conflict after their construction among the provincial governments of Punjab, Sindh and KPK provinces. These provinces are the main users of the irrigation water for agriculture. The government of the Sindh province accused the provincial government of Punjab for stealing its water share from these reservoirs. But on the other hand, the provincial government of Punjab refused the allegations and claimed that it has been using less water than its requirement to accommodate the provincial government of Sindh and KPK. The construction of new water reservoirs in Pakistan almost stopped in 1977 due to the non-resolution of the interprovincial water sharing from the already existing reservoirs. The country underwent a one and a half decade long crisis related to irrigation supplies and hydropower generation before reaching a consensus in the 1991 Water Distribution Accord. An interprovincial agreement became essential to solve the long standing dispute of canal water uses, shares in the river supplies and surplus flows in the form of floods. In 1991, a water sharing agreement among four provinces of Pakistan (Sindh, Punjab, Balochistan and KPK) was made. This accord distributed the available water among the provinces and major share of water was given to the Punjab province. This accord protected the existing uses of canal water in each province and also apportioned the balance of river supplies, including flood surpluses and future storages among the provinces (Pakistan Water Accord, 1991)

Table1.

Water Distribution Accord1991

Province	MAF	%
Punjab	54.51	53.06
Sindh	43.53	42.37
Balochistan	1.63	1.59
KPK	3.06	2.98
Total	**102.73**	**100.00**

Source: (Pakistan Water Accord, 1991 (Agreement), March 1991 and Water Accord1991, Section 6, [Online] Available at:http://www.cms.waterinfo.net.pk/pdf/wa.pdf

As the Water Distribution Accord shows above, the province Punjab got the largest share of water in comparison with the other provinces.

3.5. Current shortage of water and electricity in Pakistan

Water and Power Development Authority (WAPDA) is a federal government institution for the integrated development of water and power resources in Pakistan. WAPDA publishes its feasibility and planning reports about the water resources every year. According to WAPDA Feasibility Report 2009, with increased population, Pakistan is moving towards a situation of water shortage. The per capita surface water availability was 5260 cubic meters in 1951 when population was 34 million. In 2010, when Pakistan had an estimated population of 172 million people it was reduced to 1038 cubic meter. The WAPDA claimed that in order to meet the increasing demands of water in the country, the implementation of the KBD project was necessary. The WAPDA claimed further in the report that the demand of electricity was increasing by the day so the construction of hydro power project like KBD would be necessary to meet the growing demand of electricity in the country.

Furthermore, the WAPDA's Development Plan (2009) also described the alarming situation of shortage of electricity in the country by emphasizing that the national demand of electricity had been growing rapidly. At present the electric power generating capacity in the country is only 18000 MW from all the hydropower, thermal and nuclear sources. The demand of electricity is growing at 10% annually. Power shortage in the industrial, agricultural and domestic sectors has been evident for the past few years with the shortage assuming critical proportions last year. Pakistan has to depend primarily on hydropower for cheap electricity. So, the implementation of the KBD project was considered as necessary to meet the demands of power in the country.

3.6. Salient features of the KBD project

The Kalabagh dam is planned to be built at 210 kilometers downstream of the Tarbela dam on the Indus River. The proposed site for the dam is situated at Kalabagh in Mianwali District of the Punjab province, bordering the KPK Province in the north of Pakistan(Jang, 01 June 2006).

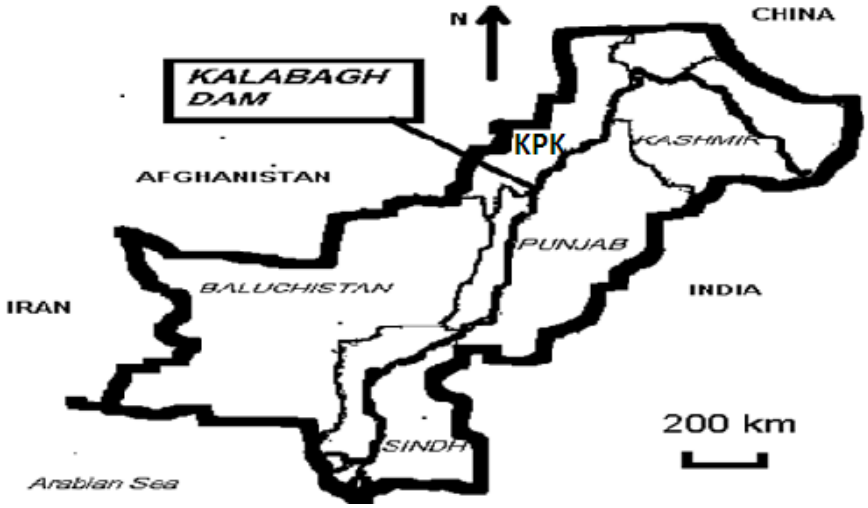

Figure2. The Proposed site for KBD Project

Source:http://www.pakistanpatriot.com/2008/05/27/kalabagh-dam-dropped-without-discussion-in-parliament/kbd7/

According to Water and Power Development Authority in Pakistan (WAPDA, 2007) the KBD project can meet the growing needs of water and electricity in Pakistan as it will have enough water storage capacity and electricity production capacity. The KBD project will create a reservoir with usable storage of 6.1 MAF. The project will have two spillways on the right bank for the disposal of flood water. In the event of highest probable flood, these spillways will have discharge capacity of over two million cusec of water. On the left bank, a power house with the power generation capacity of 3600 MW will be installed (WAPDA Kalabagh Project Report, 2007).

3.7. Historical overview of politics over the KBD project

This section of study explains the hydro politics over the KBD project. Moreover, it describes how the harsh words have been exchanged among stakeholders. These harsh words lead towards misunderstandings and misinterpretations during the communication process and has added a specific aspect to the conflict by escalating it further.

The main stakeholders in the KBD project are the provincial governments of Sindh, Punjab, KPK and the federal government of Pakistan. The KBD project does not affect the Balochistan province in any way but its provincial government supports the view point of other smaller provinces against the federal government. Each province has its own national and linguistic identity. People living in the province Punjab speak Punjabi language and they are fifty six percent of the total population of

the country. They hold the majority status. Sindhi people are living in province Sindh and they speak Sindhi language. They are seventeen percent of the total population of country. Moreover, tribal people speaking Pushto language are of sixteen percent of country's population. They are living in KPK province. Balochi speaking people are living in Balochistan province and they are eleven percent of country' population (Rehman, 1997).

The federal government appointed Kalabagh consultants (five engineering firms) to produce project proposals for the KBD project in 1982 (WAPDA Project Planning Report, 2007). When the report was published in 1984, different provincial governments started opposition against the project. On the one side, the chief ministers of the KPK and the Sindh provinces said "We were not included in the preparation plan of KBD project so we would resign as chief ministers of our provinces and would not accept the KBD plan anyway". After this statement the KBD project took on a political dimension between federal government and the provincial governments (Sindh &KPK). On the other side, one of the provincial ministers of province Punjab stated "The KBD project was beneficial for the progress of the country as it was helpful to generate electricity and store water for the irrigation of crops so, I would strongly support the construction of this project" (Jang, October 21, 1990).

According to local and national press[2] the KBD project caused more controversy in provincial relations when a powerful disapproval for the dam was shown by the political parties of the Sindh province at a twelve party's convention on March7, 1988. Twelve local political parties of the Sindh province participated in the convention and representatives of these local political parties expressed their strong opposition against the KBD project. They also tried to convince the Sindhi people to go against the KBD project by saying the provincial government of Punjab would get more share of water by the construction of KBD dam. The Sindh chief minister also claimed "The Indus Water Treaty had been violated many times by Punjab and the farmers of my province faced water shortage during their crop seasons". The Awami National Party of KPK province also organized the Peshawar convention against the KBD project in 1988. Bacha Khan (one of the leaders of this party) said "I would leave no stone unturned to stop the implementation of the KBD project and even would be happy to sacrifice my life in resistance to the implementation of this project. Moreover, I also consider the dam as the conspiracy by the Punjab government against the smaller provinces" (Ibid).

[2] National press (The Dawn) and local press (The Kawish), March 8, 1988.

The federal government responded to the protests against the KBD project by saying that the government would adopt all the possible measures to overcome the difficulties of the smaller provinces and the controversies among provinces would be settled before June, 1988. Meanwhile, the World Bank also gave a final warning that if the matters between the provinces and the federal government were not solved before June, 1988, then they would withdraw from their financial support for the KBD project. In response to the World Bank warning, the federal government suggested a roundtable conference to start a dialogue among stakeholders which would also include federal technical experts and engineers. The federal government described that the purpose of the dialogue would be the development of consensus among different stakeholders (Dawn, April 24, 1988).Before the beginning of the dialogue on the KBD project, the federal government was dismissed on May 29, 1988 due to the alleged corruption charges. Many representatives of the federal government that were taking part in the dialogue had to resign from their positions within the federal government, so the dialogue between different stakeholders could not be held. A care take government was established to conduct new elections. Ghulam Mustafa Khar, the federal minister for Water and Power of this government said "The KBD project would be constructed at all costs" (Ahmad, 1995:7-8).

After the formation of a new federal government in 1991, Prime Minister Nawaz Sharif struggled to reach on a consensus over the construction of the KBD project. The government of the Punjab province clarified that according to the fixation of Water Accord1991, Sindh provincial government would get up to 2.1 MAF (Million Acer Feet) of water from the KBD project. Still the federal government remained unsuccessful in convincing the provincial government of Sindh and KPK over the construction of dam (Malik, 2003).

In 1993, Benazir Bhutto from the Sindh Province was elected Prime Minister and after that the KBD project was included in the priority list of the federal government (Ahmad, 2004). But the provincial assembly of KPK province unanimously passed the resolution against the project by saying that lot of people would be displaced by the implementation of the KBD project and it would be difficult for the federal government to re-settle and compensate all the displaced people. Furthermore, all the energy needs of the country should be achieved through other projects running in the country (Rajput, 2004).

In October 1999, General Pervez Mushraff imposed martial law in the country. During his regime, the debate over the KBD project was more intense compared to the previous governments in the country (Surrendra, 2003). Musharraf re-announced the construction of this project by saying "The

KBD project would proceed against any opposition and the federal government will topple any provincial government that opposes the project" (Fulcher, R. March 15, 2006). Four[3] political parties in Punjab province united to protest against the proposed dam. The rally held in Lahore was charged by police and the activists of these parties were beaten up. Farooq Tariq, an organizer of the rally said "We oppose the dam because it would deny smaller provinces their share of water and would benefit the Punjab ruling class. Another leader of a political party Mr. Asfand Yar Wali Khan stated "Pakistan and the Kalabagh dam cannot co-exist. We are opposed to the disintegration of the country but if the establishment is bent on drowning its own people then we will choose how we want to die" (Ibid). In his speech he expressed that the dam was technically unfeasible and it would increase flooding problem in the areas of KPK province. The other political parties from the province Sindh (Pakistan People's Party) and the Punjab (Muslim League Nawaz) opposed the KBD project by saying that the government was undemocratic[4]. Halepoto, November 17, 2008). It can be observed that Muslim League Nawaz has been supporting the KBD project since its beginning but it has shown its disapproval for a specific period of time when country was run by a military ruler.

The KBD project has been lingering on over past few decades among the different provinces of Pakistan. Recently in 2010, Pakistan faced severe flood problems in most part of the country due to the overflow of water in Indus River. After this flooding the debate over the KBD project sparked again. The Prime Minister, Yousaf Raza Gilani (2008-2012) claimed that the implementation of the KBD project would have averted much of the flood devastation in the country (Paktribune, Aug. 10, 2010).

To sum up, the federal government and the provincial government of Punjab province emphasized the need of the KBD project in different time periods. They claimed that the project was beneficial for the progress of the country as it was helpful to generate electricity and store water for the irrigation of crops. But the regional and ethnic political parties of smaller provinces did not accept these claims. They considered the KBD project as a conspiracy by the Punjab government and argue that Punjabi people would get more benefits from the dam. In a nutshell, stakeholders have not

[3] The National Workers Party, The Labor Party Pakistan (LPP), The Pakistan Mazdoor Mehaz and the Mazdoor Kissan Party

[4] After the implementation 1973 Constitution, country experienced military regimes in (1977-1987) and (1999-2008) (Askari, 2011). See also chapter 5 "Analysis of Interprovincial Relations and their Effect on the Controversy of KBD Conflict"

trusted each other since the announcement of the KBD project and many times harsh words have been exchanged among them.

4. Stakeholders and their View Point on the KBD Project

It has been mentioned earlier that the main stakeholders in the KBD project are the provincial governments of Sindh, Punjab, KPK and the federal government of Pakistan. This section describes the political and administrative structure of these stakeholders. Moreover, it explains the power struggle and water dispute management institutions among stakeholders. Further, it describes the view point of different stakeholders on the KBD project.

4.1.Political and administrative structure of federal and provincial governments

The Government in Pakistanis a federal parliamentary system, where the President is considered as the head of state and the Prime Minister as the head of government. The parliament of Pakistan consists of two Houses to be known respectively as the national assembly and the senate. Members of the national assembly are elected by direct voting in a constituency through a secret ballot. The candidate, who obtains the highest number of votes in a constituency, is elected as a member of national assembly or provincial assembly depending upon the candidate whether he is running for national assembly or provincial assembly. The political party, which has the most elected members in national assembly, establishes a new government in the country. In the same way, any political party having the majority of the elected members in any province establishes a government in that province. It means any elected government represents the mind-set of the most of the people living in that province. Pakistan is a federation of four provinces. The Seats in the national assembly are allocated to each province on basis of their population (Blood, 1994).The constituency-wise detail of seats in the National Assembly is as under:

Table3.

National Assembly-Number of Seats	
Province	General seats
Punjab	148
Sindh	61
KPK	35
Balochistan	14

Source: (Table modified by author based on Election Commission of Pakistan, 2008)

Each province has a governor, a council of ministers headed by a chief minister appointed by the governor, and a provincial assembly. There is division of responsibilities between federal and provincial governments. Most of the services in the provincial areas such as health, education, agriculture, and roads, for example, are managed by the provincial governments. Federal government can also legislate in these areas for the sake of national policy and international aspects of those services (Ibid)

4.2.Power struggle and division of powers between federal and provincial governments

In 1947, Pakistan adopted the Government of India Act 1935 with some amendments as the interim constitution, with an assumption that the new country will function as a federation[5]. But, the amendments in that constitution further strengthened the control of the central government over the provinces. The newly born country inherited weak democratic institutions. The only developed institutions after independence were the colonial bureaucracy and the military. Both these institutions were part of the central government. The supremacy of the central government was established from day one due to the absence of other representative institutions (Mushtaq, 2009).

[5]According to Oxford dictionary federation is "a group of states with a central government but independence in internal affairs"

The first Constitution of Pakistan was promulgated in 1956.The distribution of legislative powers between the federation and the federating units were enumerated in three lists[6]. The federal legislative list had thirty items, the provincial list ninety and the concurrent list only had nineteen items. Considerable powers were given to provincial legislatures. But, the constitution was abolished by the martial law administration of General Ayub Khan in 1958 just after the two years of its implementation. He introduced a highly centralized Constitution in 1962. This Constitution provided a Presidential form of government and a single legislative list of forty nine federal subjects including defense, external affairs, inter-provincial trade and commerce etc. (Goraya, 2010).

The current constitution of Pakistan was adopted in 1973 by the federal government of Pakistan. Provincial autonomy and the recognition of the right of the self determination[7] of the people were promised in the constitution of 1973 but this constitution was abrogated from time to time by the rule of different military regimes in the country (Rehman, 2010).

From 1977 until 1987, the country was under the leadership of General Zia-ul-Haq, a military ruler who restricted the political activities of all political parties. Another military government took over the country in October 1999, when General Pervez Musharraf displaced Prime Minister Nawaz Sharif's civilian government and returned the country to military rule. Both regimes tempered the constitution of the country to serve their own power and interests and the promise of provincial autonomy was not fulfilled. Political parties in the country including the PPP and MLN[8] could not help people to restore democracy and the provincial autonomy of the provinces because of lack of effective internal organization and restrictions imposed by military regimes (Askari, 2011).

Democracy was restored again in 2008 after the establishment of a new civilian government. President Zardari (2008-continue) signed a new law named "18th Amendment into Pakistan's Constitution" on April 19, 2010.It empowered provinces to raise loans at home and abroad. In an innovative measure, it provided for joint and equal ownership of the mineral wealth found in a province or its adjacent waters by the federation and the provinces. The Amendment abolished the

[6] According to political science dictionary legislative list refers to the jurisdiction of an authority to legislate and to exercise executive powers within a specified area. For example, federal legislative list means that federal government has jurisdiction over a particular item/department and it has the power and authority to enact, execute, and enforce general legislation within that department.

[7]According to United Nations' international covenant on economic, social and cultural rights; all people have the right of self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development.

[8]Pakistan people's Party (PPP), Muslim League Nawaz (MLN)

concurrent list in principle and transferred forty of its forty seven subjects to provinces. In a nutshell, this amendment of law enhanced provincial autonomy and transferred residuary powers to the provinces (Fair, 2011)

4.3.Institutional arrangements for water management

This section describes the major water management institution in Pakistan, which is named WAPDA. Also, this section shows how WAPDA works in planning, investigating and the implementation of different water resource projects in the country.

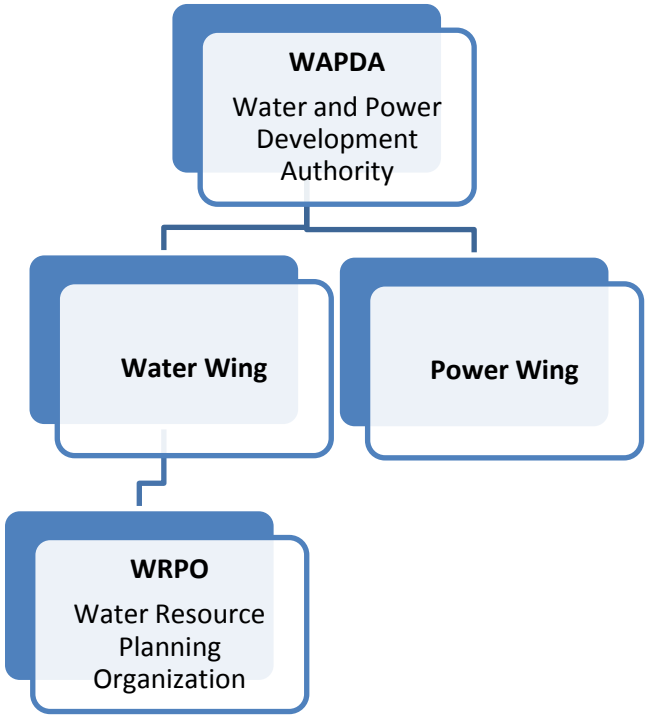

Figure3.

Source: Diagram by Author

WAPDA was formed in 1959 to carry out the tasks of investigating, planning and executing schemes for irrigation, drainage. WAPDA is as an autonomous body from the Ministry of Water and Power but it works in collaboration with this ministry. WAPDA is responsible for the integrated development of water and power resources in Pakistan. The organization was also given the responsibility of implementing the Indus Basin Settlement Plan that was signed by India and Pakistan in 1960 to develop replacement works for management of rivers and irrigation systems. Since then, WAPDA has been working with water development projects by doing extensive research and investigation to expand country's water resources.

The Water Wing of WAPDA controls the water sector in the entire country. The Water Wing is divided into north, central and south zones, generally covering the North Western Frontier Provinces (KPK) and the provinces of Punjab and Sindh respectively. Presently, the two major water reservoirs of the country, the Tarbela dam and the Mangla dam are operated by WAPDA. The Planning Division of the Water Wing, headed by a General Manager, looks after all planning activities in the water reservoirs. The power wing of WAPDA is responsible for hydropower generation, transmission and its distribution. Moreover, it collects revenue from all the electricity consumers (WAPDA, 2011).

The Water Resources Planning Organization (WRPO) is responsible for preparing, reviewing and updating water sector development plans. It also conducts the research for WAPDA and Federal Ministry of Water and Power on different irrigation projects and water resources by considering the social and environmental factors. After carrying out the research WRPO designs policies used to implement these projects. WRPO comprises five multidisciplinary directorates namely: Directorate of Irrigation & Drainage, Agriculture, Economics, Computer Application and Environment under Project Director (WRPO). These all units work together to formulate any policy on water resources (Ibid).

4.4. Special institutions for water dispute resolution

I. Council of Common Interest (CCI)

Provincial governments of Pakistan also share the authority over water resource management with the federal government. This authority is understood as a part of provincial autonomy according to the constitution of the country. After the passage of 18thConstitutional Amendment[9], CCI is the supreme institute to settle center-province or inter-provincial conflicts over water resource management. It exercises supervision and control over other water dispute institutes like IRSA. The Council membership comprises of all four provincial chief ministers and an equal number of members from the federal government to be nominated by the Prime Minister. Normally, the Prime Minister chairs the council; otherwise the President can nominate a federal minister as chairperson of the council. CCI presents its report on any conflict to both houses of parliament. The council made its quarterly meetings mandatory, provided for a permanent secretariat and expanded its

[9] The18th Amendment has been done under Article 153-154 of the Constitution of 1973

mandate to include supervision and control over other water management institutions. These changes potentially increase its importance (Waseem, 2010).

II. Indus River System Authority (IRSA)

Indus River System Authority (IRSA)is a federal government organization. It was established under the IRSA Act of 1992 at the time of inter-provincial Water Apportionment Accord of 1991(described in chapter 2). The accord apportioned the water among the four provinces. It also established a formula to distribute surplus and scarcity of water. The function of IRSA is to allocate and lay down the basis for the regulation and distribution of available surface water among the provinces. Moreover, it also settles any question that may arise between two or more provinces in respect of distribution of river and reservoir waters. But any decision of the authority can be challenged and reviewed by CCI. The IRSA is expected to issue directives to provincial governments and WAPDA. These directives are termed as binding for them. The authority consists of five members. One representing every province and the Chairman is appointed by the federal government (The Ministry of Water and Power, 2012).

In the wake of current water scarcity and other water related problems among the provinces of Pakistan, the authority holds an important position in water conflict management. Earlier, IRSA had no source of income and its expenses were met through federal government grants but now, it charge water utilization tax from the provinces. The collected tax will be used to return the grant of federal government (Pakistan Today, 9 June 2012).

To sum up, WAPDA is an autonomous body works with the collaboration of federal ministry of water and power. Its main functions are planning, controlling water reservoirs and collecting revenues from the consumers of electricity. IRSA works at federal level and its main function is to allocate water to all the provinces. It can also settle water disputes among different provinces but its decisions can be reviewed by CCI. Hence, CCI is the most powerful institution to settle water disputes in the country.

4.5. Objections of the provincial governments

The provincial government of the KPK province has been opposing the construction of dam in the last decades. They have different concerns over the implementation of the KBD project. According to the provincial government of KPK, the construction of this dam would increase the flooding of the Peshawar Valley including the town of Nowshera. The provincial government has also claimed

that the drainages of surrounding areas of Mardan, Pabbi and Swabi plains would be adversely affected by the KBD reservoir thus creating water-logging[10] and salinity. Their strongest apprehension however was the displacement of large number of people. The provincial government was worried because in the past, the federal government could not provide proper compensation to the people who were displaced due to the construction of the Terbela dam. Moreover, the provincial government of KPK also argued that the fertile cultivated land in the province would be submerged (Kalabagh Dam Project Report, 2007:5-8).

The provincial government of Sindh also has reservations regarding the construction of the KBD project. The provincial government was opposing the KBD project on the basis of following reservations: the provincial government claimed that the project would convert the Sindh province into a desert because there would be no surplus water to fill the reservoir; and a mangrove forest, located near sea water, that is already threatened, would be further affected adversely (WAPDA Report, 2007:9-11) Government of Punjab has no objection over the construction of the KBD project**.** On October 2010, the assembly of the Punjab province passed the resolution[11]in favor of the project. Moreover, Punjab government said that the federal government experts and engineers say that the Kalabagh dam is feasible and beneficial for all of Pakistan; therefore, it should start its efforts for the development of a consensus among all the four provinces for the earliest construction of the dam (Dawn, 06 October 2011).

4.6. Justifications by WAPDA and other experts to the concerns of provincial governments

WAPDA responded to the concerns of the different provinces by carrying out research with the help of their experts and engineers. The first concern of the provincial government of KPK was that the construction of the KBD project would increase the flooding of Peshawar Valley including Nowshera town which is located in KPK province.

According to WAPDA (2007), the Kalabagh reservoir would stop about ten miles downstream of Nowshera town so this town would not be flooded. This claim of WAPDA was later reviewed and supported by a panel of technical experts appointed by the government of KPK province.

[10] According to Oxford dictionary, water logging is a condition of ground when it becomes so full ofwater that it cannot hold any more and becomes flooded

[11] According to the constitution of 1973, resolution passed by any provincial government is not binding on federal government. However, federal government may consider the resolution if it is found in general public interest.

The second concern of KPK provincial government was about the displacement of local people by the construction of the dam. The WAPDA promised however, that properties like land, trees, buildings that would be affected by the KBD project would be compensated at market price according to the present land acquisition act in the country. It was proposed to offer alternative land with minimum 12.5 acres to the land owning families, requiring all about 74,000 acres of irrigated land. The non-agriculturist affected people from the KBD project would be given entrepreneurship knowledge and training so they would be able to invest their compensation money in skillful ways, thus giving them an assured means of livelihood for future (WAPDA Kalabagh dam Report, 2007).

The major concern of the government in the Sindh province was that the KBD dam would convert the province into desert by reducing already available water to province. WAPDA responded by saying that the KBD project will not consume more water but it will only store water during flood season and make it available on a crop demand basis during the remaining dry periods of the year. The real demonstration of this available water for crops was observed after the construction of the Tarbela dam in 1976. Before the construction the Tarbela dam, the average annual canal withdrawals for the Sindh provincial government was 35.6 Million Acer Feet, but after the construction of the Tarbela dam, it increased with over 24 percent to 44.2 MAF. By keeping in view the past increase in water share of the Sindh provincial government, WAPDA engineers estimated that after the construction of the KBD dam, the canal withdrawals for the Sindh province would be further increased by 2.25 MAF annually (Ashfaque, 12 Dec.2005).

Moreover, according to Pakistan Engineering Congress[12] (2011:294) "The KBD project is indispensable to meet the growing needs of water and power in the Country. There is no alternative to this project for providing the hydropower (3600 MW) and irrigation water (6.1 MAF) in the coming years. Further, Sindh province would get more benefit from the KBD project as it is deficient in rainfall and sweet ground water. Our experts have confirmed the technical and financial viability of this project. We have already lost more than two decades in the pursuit of its implementation. No more time should be lost in keeping the matter dormant" (Ibid). In addition to this, Bashir A. Malik (a water expert and former chief technical advisor of the World Bank and

[12] Pakistan Engineering Congress is the oldest independent engineering body of the sub-continent that was established in 1912. Earlier, it was named Punjab engineering Congress. It offers opportunities for sharing of knowledge and experiences of the engineering practices for promotion of professional development in the country. Available at:[pecongress.org.pk]

United Nations) has said "The Sindh and KPK provinces would face drought conditions if the KBD project was not implemented in next few years" (The News International, 10 October 2011).

5. Analysis of Interprovincial Relations and their Effect on the Controversy of KBD Conflict

It has been discussed in the chapter “Stakeholders and their view point on the KBD project” of the study that stakeholders have divergence of views on the construction of the KBD project despite having water management institutions. So, it is very important to analyze the reasons of such disagreement which lead to the failure of water management institutions like IRSA and CCI. This chapter deals with the factors that are responsible for interprovincial disharmony and also are the main contributors to the intensification of the KBD conflict.

5.1. National Financial Commission Awards (NFC)

One reason for the intensified conflict over the KBD project is the NFC Awards. Article 160 of the constitution of Pakistan says that after every five years the president shall constitute a National Finance Commission. This National Finance Commission will review the formula for the distribution of funds, taxes and other monetary assets among the federal government and among the provinces of Pakistan. This formula of distribution of resources is named National Financial Commission Award**(**NFC). Different types of taxes are collected in each province by the federal government, and then re-distributed to provinces according to the NFC formula (see Table3). The resources from which the taxes are collected are as following: income tax, wealth tax, taxes on the sales and purchase in all provinces, custom duties and export duties on cotton.

Pakistan has had six NFC awards since 1973, three out of six NFC awards had been enforced in 1974, 1991 and in 1997. But the three NFCs constituted in 1979, 1984 and 2,000 failed to reach any consensus over the distribution formula of resources because Punjab government insisted on resource distribution on the basis of population as Punjab is the most populated province in Pakistan. The other three provincial governments (KPK, Sindh and Balochistan) demanded on giving importance to the revenue generated by each province and the level of poverty in the provinces (Ahmed, et. al., 2007).

The Fifth NFC Award adopted in 1997, was supposed to be valid for five years but the failure of agreement on a sixth NFC award in 2000, kept the fifth award in operation. According to the 1997 award, 63 percent of the pooled taxes would go to the federal government and 37% to the provinces

and the percentage of distribution would be slightly changed each year. Allocation of the share to each provincial government out of 37% was as follow;

Table4.

Province	Percentage of re-distribution of resources out of total collected resources by federal govt.
Punjab	50.00%
Sindh	34.85%
KPK	9.93%
Balochistan	5.22%

Source: Government of Pakistan (2006) The Gazette of Pakistan, "An Order further to amend the Distribution of Revenues and Grants-in-Aids Order, 1997". OrderNo.1. Ministry of Law, Justice and Human Rights.

It can be observed from the above table that most of the pooled tax percentage was allocated to provincial government of Punjab by the federal government. According to the report of national finance commission (2006), based on the average of the years 1997 to 2000, the approximate percentages of pooled taxes collected by each province were 65 percent from Sindh, 25 percent from Punjab, 7 percent from KPK, and 3 percent from Balochistan province. So, the largest share of taxes was collected from the Sindh province but the largest share of resources was re-distributed to the Punjab province (ibid).

The above section shows that the provinces and federal government had been involved in conflict since the beginning of NFC awards in 1973 and many times the award had not been enforced because of the failure of consensus among stakeholders. It can be assumed here that the differences among provinces over NFC awards might be one of the reasons which lead them to the opposition of the KBD project. Provincial governments especially the Sindh and KPK might have an earlier

perception from NFC awards grants that the federal government didn't listen to their needs so they would not be able to get their rightful water share from the KBD project as well. So, after the announcement of KBD project in 1982, the chief ministers of the KPK and the Sindh provinces opposed the project plan and did not accept it anyway (Hoti, 1990).

5.2. Ethnicity and water politics

A second reason for the intensified conflict over the KBD project is the problem of ethnicity in the country. Pakistan has ethnically diverse population in its four provinces. People in each province have their own linguistic identity as they speak different languages. The Punjabi people have majority both numerically (56 percent of the total population) and militarily (80 percent) of the army. Military has been ruling power in Pakistan many times since its inception. The ruling military having appropriated state power, identified the state and the nation narrowly with their own particular purposes and interests. Their major focus was to prolong their regimes at any cost. In the eyes of other smaller ethnic groups, the Pakistani 'nation' has been appropriated by Punjabis who dominate the military and civil bureaucracy. This dominance has incited resentment and distrust among other small provinces and they think themselves as subject peoples who have not been given their rightful place in the army and civil bureaucracy of the country. These ethnic strains have given rise to the regional and ethnic political parties in every province (Ishtiaq, 2006).

Earlier, it has been explained (under section 3.4 of this study) that there was dispute among different provincial governments over the share of water after the construction of the Mangla and Tarbela dams. The provincial governments of the smaller provinces accused the provincial government of Punjab for stealing their water share from these reservoirs. However, this dispute was settled under the Water Accord 1991. In case of the KBD project, Punjab government and federal government have promised that all the stakeholders would get rightful share of water after its construction. And, many technical experts from Pakistan Engineering Congress and even from smaller provinces confirmed the technical and financial feasibility of the project as claimed by WAPDA. Moreover, one of the former chief ministers of KPK province stated that dam would give more benefit to KPK province as it would irrigate a large area of land in that province. But the regional and ethnic political parties of smaller provinces are not ready to accept these claims. They consider the KBD project as a conspiracy by the Punjab government and argue that Punjabi people have strong influence in civil and military bureaucracy so it is obvious that they would get more benefits from the dam. They also think that dam would favor the people of Punjab province at the expense of their people.

5.3. Ineffective role of Council of Common Interests (CCI)

A third reason for the intensified conflict over the KBD project is the ineffective role of CCI in water dispute management. CCI is powerful in theory but weak in practice. Procedurally, settlement of disputes often becomes a function of relations between the two or more parties involved in the dispute. The meetings of CCI are few and far between. This makes CCI ineffective as an institutional for conflict resolution. The purpose of CCI was laid down in the constitution to address the demands of the provincial governments of all provinces. But, many times the leaders of the different political parties in the provincial constituent assemblies has expressed a strong resentment against the absolute control exercised by the federal government over the matters of electricity, river waters and dam projects. The KBD project is an example of hegemony of federal government over CCI. A decision of CCI has an obligatory effect on the federal government unless the decision is modified by the parliament of Pakistan. But the KBD issue has not been presented before CCI by federal government since last decade. Recently, Lahore High Court sought a reply from federal government and CCI over not taking the issue of the KBD seriously. In an answer, a written reply is submitted on behalf of the CCI said that they have no objection and work on the project would be started after the federal government issued directions to this effect (Dawn, 31 May 2012).

5.4. Politicization of Indus River System Authority (IRSA)

The fourth reason for the intensified conflict over the KBD project is the politicization of IRSA. IRSA was considered a hopeful sign to solve out water dispute after its establishment. But, soon it provoked criticism even led to the temporary abrogation of Water Accord 1991 in 1994 by Prime Minister Bhutto. He belonged to province Sindh, so he awarded a greater share of water to Sindh by proposing a different formula. After few years, IRSA has been drawn into the wider dispute between the provincial governments when Sindh government accused that Punjab government was delegating a chairperson so the federal government would take the side of Punjab government in the allocation of water resources. Resultantly, IRSA was dragged into interprovincial rivalry and power politics on federal and provincial levels. Each province expected to draw more benefits from getting its respective elected chairperson for IRSA (Paukert, 2002). Another challenge to the authority of IRSA comes from WAPDA. It is an autonomous body and it collects revenues on the consumption of electricity from all over the country. IRSA was facing funding problems from the federal government so CCI requested WAPDA to pay water tax on the generation of hydro electricity to IRSA. Because IRSA allocates water to all the provinces and the electricity is generated from that

water. In response, WAPDA challenged the authority of IRSA in managing water allocation to provinces and refused to pay this electricity surcharge to IRSA. Hence, both the institutes locked horns over hydro power generation tax. (The Nation, 21 October 2011).

The issue of the KBD project has also been discussed in the meetings of IRSA but strong opposition by the governments of smaller provinces has marked the limits of the authority. No consensus has been reached on the implementation of the KBD project during these meetings (Ibid).

5.5. Case Study of the Tarbela Dam Project (TDP)

In order to get a more comprehensive picture on the struggle and opposition behind the proposed KBD project, it is important to take a look at the politics and effects surrounding another major dam project, the Tarbela Dam Project. The TDP is also built on the Indus River (see map on pp. 15).It is located in Haripur district in KPK province. The dam was completed in 1974 and was designed to store water from the Indus River for irrigation and hydroelectric power generation (Tate et.al, 2000).

5.5.1. Economic impacts of TDP

The rural farming population that directly got irrigation benefits was estimated to be in the order of seven to ten million. The cultivated and irrigated area was also increased after the construction of TDP. The increase in cultivated area was twelve percent from 1975 to 1998. There was an evident shift in the cropping pattern in the Indus basin and increases in the cropped area were found for wheat (36%), cotton (44%), rice (39%) and sugarcane (52%). Hence, a considerable increase in crop production was observed (Asianics Agro-Dev. Int. Final Report, 2000).

Moreover, average annual power generation from TDP during 1978-98 was 9255 Gigawatt Hour (GWh), 82% of predicted before the construction of the project. After installing of full capacity in 1993, the average annual generation was 14300 GWh in 1993-98.Major beneficiaries have been the enterprising industrialists who received cheap electricity. It helped them reducing their cost of production. The provincial government of KPK where TDP is located, has been receiving Rs.6 billion ($139 million in1998 prices) in annual royalty from hydropower generation at Tarbela (Ibid).

5.5.2. Social impacts

I. Livelihood of affected people and their problems

More than 3 million people particularly in Thatta and Badin areas were involved in fisheries. Landless and poor communities of Keti Bandar and Ibrahim Hydri areas were dependent on forest land. They used to make different products from forests for their earnings. More than twenty percent of people living in TDP area were working as labor in agriculture sector. All these communities faced negative consequences after the construction of this dam. Fish catches were considered to have decreased significantly as a result of reduced dry season flows in the Indus River. People in Ibrahim Hyderi and Keti Bandar, stated that the upstream development like TDP has reduced the flow of river water below Kotri into the Indus delta (Trar, 2006). This has resulted in a reduced supply of fresh water for drinking purposes and for agriculture. The intrusion of sea water has been gradually increasing and agriculture in the delta has received a severe setback. Mangrove forests and fish breeding grounds have also been negatively affected. There has been a large-scale migration of population from the lower Indus delta to Karachi city and its adjacent areas in search of new livelihood. Owing to the increased agricultural mechanization there was some displacement of farm labor that had to find alternative livelihoods in the urban areas. Apart from harmful consequences, some positive trends in the livelihood of affected people were also found. For example employment in agro-industries like cotton and sugarcane-related industries had increased manifold. Moreover, during the peak construction period, a labor force of about 15,000 was employed at TDP construction place. This has helped to train highly skilled manpower for further national and international development projects (Ibid).

II. Resettlement issue

According to Cernea and Michael (1996) developmental projects like dams changes the status quo of the many people who are displaced by these projects. It may bring undesirable consequences for the displaced people if they are not resettled properly, so it is highly important to resettle them again.

The total number of villages affected from the construction of TDP were one hundred and twenty, and the number of people affected closer to 96, 000. The complexities of the problems arising from the displacement of such large number of people prompted the government to create a separate organization known as the Tarbela Dam Resettlement Organization. This organization was

responsible for the assessment and payment of compensation for the properties of displaced people. The main criterion for compensation with alternate land was whether land holdings were greater than 0.2 Hectare (ha) of irrigated land or 0.8ha of rain fed land. Approximately two-thirds of the affected population was found eligible for replacement land. People with houses in the affected area were to be paid cash compensations. The Tarbela Dam Resettlement Organization however not solve out the problems of many people who were displaced during the construction of TDP. Some of the affected people by the TDP then decided to contact the High Court for compensation but the federal ministry for water and power claimed that all legitimate compensations for the displaced people had already been made and there was no need to re-open this issue. In 1999 there were twenty-seven cases under litigation in different courts between the affected people and WAPDA over the compensation money and land (Rafiq, 26 July 26, 1999).

5.5.3. Consequences of TDP for the KBD project

According to Ely Erslana et.al. (2000) livelihood of people living in the proposed area of the KBD project is quite similar to the livelihood of TDP. People are involved in agriculture-sector labor. They are dependent on the mangrove forests and fisheries for their earnings.

It can be observed from the above section of study that the implementation of TDP had adversely affected the livelihood of people. In many cases, negative impacts were the result of inadequate compensation and loss of livelihood leading to lowered social status. So, it can be assumed that the future concerns of the stakeholders of the KBD project about the mangrove forests and livelihood of their people are based from the past experience of the similar situation. Moreover, the case study of TDP shows that the displaced people are not re-settled properly. And, their compensation cases are still lingering on in the courts. As a result, during the preparations for other hydro power projects in the country as for example the KBD project, the KPK provincial government agitated against unsatisfactory resettlement of the displaced people.

No doubt, there was an inadequate participation of stakeholders in the decision-making processes regarding compensation of livelihood and re-settlement issues in TDP. But, TDP had numerous positive impacts on the water storage capacity, agricultural economy and power generation capacity of the country. Similarly, the construction of the KBD project would definitely ease the water and power difficulties of the country.

5.6. Case study of Sardar Sarovar Project (SSP) in India

The case study of SSP explains how the Indian government managed to implement this project despite all the opposition from different stakeholders. Moreover, this case study helps to understand the major difficulties in achieving consensus on the implementation of the KBD project.

In April 1961, India's first Prime Minister, Jawaharlal Nehru, laid the foundation stone for the SSP on the Narmada River near Navagam in Gujarat. This was a hydropower project and from its beginning it became a controversial issue between the governments of the Indian states of Gujrat, Maharashtra and Madhya Pardesh over the height of the dam, re-settlement of displaced people, the sharing of costs and the share of power generation by this project (Komala, 2006).

In order to resolve the inter-state differences, the government of India established the Narmada Water Dispute Tribunal in October 1969. The tribunal declared its final decision in August 1978, which included the formula to allocate the water, power, and costs of the SSP among all stakeholders. The tribunal also described the obligations of three involved states to families affected by the SSP; in particular, the tribunal guaranteed every displaced family losing land to be compensated properly. The government of Madhya Pardesh accepted the decision of the tribunal. In 1985, the World Bank came into a credit and loan agreement with the government of India to fund the SSP. The construction on the dam accelerated, and with it came countless unanticipated challenges of rehabilitation of local people. Many of the Narmada riverbank residents living in secluded villages were left out of the rehabilitation process. Frustration and resentment of affected communities led them to start a social movement named Narmada Bachao Andolan (NBA) against the construction of the SSP. This social movement attracted the environmentalists and human rights activists from all over the country and abroad as well. They also became part of non-violent protests against the SSP in India. These protests gained international attention as the stories of human rights and environmental violations achieved global notoriety, criticism also shifted to the World Bank. Pressure mounted, and the World Bank had to withdraw from the funding of the SSP project in 1993 (ibid).

Withdrawal of Bank support could not slow down the construction of the SSP, as the national and state governments gathered resources to continue work on the SSP. But increasing demands by affected communities and the NBA to stop the construction of the SSP remained successful in 1995, when the Supreme Court of India ordered to halt the construction of the SSP. In 1999, despite all the opposition of the SSP project by NBA, the Supreme Court of India allowed the further construction

on the SSP. The Court issued an opinion on the future of the dam on October 18, 2000, and immediately approved an increase in the dam height and also gave directions to the state governments of Madhya Pradesh and Maharashtra and Gujarat that before the beginning of further construction, they had to ensure that all those displaced people by the raise in height of 5 meters of the SSP, had already been satisfactorily rehabilitated, and also that suitable vacant land for rehabilitating them was already in the possession of the respective States (Smita, 2008).

We can observe from the case study of the SSP that at one point of time, despite all the opposition and protests from the affected communities, the Indian government managed to get the support from other involved state governments for the implementation of the SSP. The Indian government and other involved state governments collectively gathered their own resources after the withdrawal of World Bank from the financial support of the project in 1993. This is a striking contrast to the KBD project where all the involved provincial governments never came to an agreement on the construction of the project. Because, there is a history of hostility among the stakeholders of the KBD conflict on the other issue as well as they have been involved in disputes over the distribution of other resources like the NFC Awards. Moreover, there was a continuous power struggle to get more autonomy among federal government and different provincial governments during different time periods[13]. Hence, all these problems have contributed to the disagreement over the KBD project.

5. Concluding Discussion

I will start this discussion by verifying that what happened in the KBD case was actually the same phenomenon described by Swain (2004). He argued that difference in the perceptions of different stakeholders is the reason for the emergence of conflict over water resources. He also described that water resources can trigger conflicts between the state and its internal groups. The development of water resources by any state by building different kinds of infrastructure like dams, irrigation canals might be perceived by the local population against their interests. As a result, regional powers in that particular area (where new water resources are supposed to be built) may be activated and start challenging the actions of the state. I find this theory relevant to understand the KBD conflict as the federal government of Pakistan announced the development of the KBD project to meet the growing needs of water and electricity, the provincial governments of different smaller provinces considered the construction of dam against their interests. The provincial governments of Sindh and KPK

[13]Detail has been provided under section 1.2 of the study

thought that the provincial government of Punjab would get more share of water from the KBD project as they had an earlier perception that Punjab government was taking more water from the Tarbela and the Mangla dam (Water Accord 1991). Moreover, the provincial government of the KPK province also claimed that a vast piece of their fertile land would be submerged and they would also be displaced by the construction of the KBD project so they thought that this project was against their interests.

To sum up, no doubt there is an incompatibility among the interests of stakeholders of the KBD project but I think this is not the only reason for the intensified conflict. Lack of trust and exchange of harsh words by the stakeholders during the communication process have added a specific aspect to the conflict situation by escalating it further as described by Hallgren (2003). He explained in his theory that conflict is not only an outcome of opposing interests but that social interaction is the major factor. Conflict is a social interaction during which the actors trust in the interaction is decreasing. Actors misinterpret or misperceive each other's actions or intentions. The actors might start to think that the others' intentions would prevent them from getting what they want. Their subsequent actions are based on these misunderstandings and in a result trust level starts to decrease among stakeholders.

In the case of the KBD conflict, it has been explained in the study that the purpose of the construction of the KBD project has been misinterpreted by the different political leaders of smaller provinces. They regarded the dam as the conspiracy by the government of Punjab. They claimed that the purpose of the dam was just to facilitate the people of Punjab at the cost of their people. Afterwards, very strong and harsh words have been exchanged by stakeholders. One of the ministers of the federal government stated that dam would be constructed at all costs as it would provide water and generate electricity for all the stakeholders. From these words, regional political parties of smaller provinces got the impression that the federal government would construct the dam, no matter if they would suffer or not. Their grievances would not be addressed properly. In a subsequent action and thinking that the intentions of the federal government would restrict their desires (as described by Hallgren), political leaders of smaller provinces used very harsh words to express their needs. For example one of the political leaders claimed that Pakistan and the KBD cannot co-exist and the other stated that he would be happy to sacrifice his life to stop the construction of the KBD project (see Section 3.7). From these statements it can be observed that actors misperceived and misinterpreted the actions of each other and it has decreased their trust to the interaction. Moreover, it added a specific aspect to the conflict situation and escalated it further.

According to the theory outlined above, the signs of distrust in the situation are that the actors make attempts to change the situation. Some of the methods to change the situation are to increase their own influence on the situation and decrease the influence of others with the use of violence, questioning the other's credibility, and legitimacy. These methods also intensify the already existing conflict (Hallgren & Ljung 2005). In the KBD conflict situation we can find these examples. It has been explained under section 3.7 of the study that the activists of different regional political parties were charged by police and were beaten up when they were launching a protest against the KBD project. This action depicts the use of physical violence in order to change the situation. Moreover, the federal government has not presented the KBD case in front of ICC which is the main institute to settle center-province or inter-provincial disputes in the country. This intention of the federal government could also be seen as a way to control the situation and use it in its favor. Furthermore, WAPDA has been challenging the authority and legitimacy of IRSA in managing water allocation to provinces and refused to pay hydro power generation tax to IRSA (see section 5.4). This action could be observed as a clear sign of distrust among stakeholders where they challenge the credibility of each other. All these methods to change the situation have considerably contributed to the procrastinating of the KBD project and increased the conflict situation. Hence the actors trust in the interaction has been decreased and conflict has increased further.

Water has vital importance in all aspects of human life. Demand of water and electricity is on the rise in Pakistan. To accommodate the demand, several federal governments have emphasized the need to move forward with the KBD project in the country. As the study describes, this project has been lingering on for decades due to different controversies between the federal government and provincial governments from time to time. There is a considerable resistance against this project in the smaller provinces of the country. This difference of opinion is mounting distrust between federal and provincial governments. Due to the controversy over the decades regarding the KBD project, it was considered important to observe the relations between the federal government and provincial governments on the matters of ethnicity, provincial autonomy and NFC Awards. The purpose of study their relationships was to get a broad and clear picture of the whole controversy surrounding the KBD project and to see if there were some other matters that contributed to the controversy of the KBD project.

It has been found in the study that all the provinces had been caught up in different disputes with the federal governments during different time periods. The construction of reservoirs like the Mangla and Tarbela dams engendered the dispute over the allocation of water share among the provincial

governments of Punjab, Sindh and KPK. These provinces were the main users of the irrigation water from these dams. The government of Sindh province accused the provincial government of Punjab for stealing its water share from these reservoirs. But the provincial government of Punjab refused the allegations and claimed that it has been using less water than its requirement to accommodate the provincial government of Sindh and KPK. The development of new water reservoirs in the country was almost stopped in 1977 due to the non-resolution of already existing disputes. The country faced a one and a half decade long crisis related to irrigation supplies and hydropower generation before reaching a consensus in the 1991 Water Distribution Accord.

Moreover, the provinces and the federal government have been involved in conflict since the beginning of NFC awards in 1973, which many times had not been enforced because of the failure of consensus among stakeholders. Provincial governments of smaller provinces like KPK and Sindh showed their grievances against the distribution formula of NFC awards. Later, these provincial governments developed the perception that federal government did not listen to their needs about NFC awards so they would not be able to get their rightful share of water from the KBD project.

Furthermore, the institutes of water dispute management remained totally ineffective to resolve the KBD conflict because the decision making process about water disputes is highly centralized. For example, despite all the constitutional provisions of CCI, the federal government took the decision on its own and did not present the KBD conflict before CCI since last decade. To follow the procedure, it should have referred the issue to the CCI. IRSA has also failed to resolve the water disputes as it was dragged into power politics on federal and provincial levels.

In addition to this, the case study of TDP showed that almost 96,000 people were displaced from the KPK province during the construction of this dam. Many of the displaced people were not compensated properly which created mistrust between displaced people, the provincial government of KPK province and the federal government of the country. Most importantly, the constitution of the country which was adopted in 1973 had been abrogated many times by different military regimes. Military regimes empowered the central government by introducing various constitutional amendments and gave fewer powers to provinces. Different political parties were struggling for democracy in the country and the provincial governments were struggling for their autonomy at same time.

All of the above disputes were the cause of growing tensions between the provinces and the federal government. So, when the KBD project was announced in 1982 among all the other ongoing

controversies between the provinces and the federal government, it faced strong opposition from the different provinces. The undemocratic governments made it more difficult to manage the KBD dispute by creating a gap of interest and miscommunication between small provinces and the federal government through ignoring their demand for provincial autonomy. The ethnic and regional political parties in the provinces have further politicized the issue. These political parties have been opposing the project on the basis of their earlier perceptions that Punjab government would use more water after the construction of this project despite the repeated promises from the federal government and Punjab government that all the stakeholders would get their rightful share of water from the KBD project. Moreover, these political parties are not ready to accept the technical feasibility of the project even though it has been confirmed by Pakistan Engineering Congress and the technical experts from their own provinces. All these circumstances led toward towards a deadlock position and the actors trust to the interaction has considerably decreased.

Most of all, there is a need to re-build the trust of stakeholders in the interaction and communication process. Because when the actors of a common issue have different interests or perspectives but have appropriate trust then they can think about things for common interest. There is not a single theory or approach that can re-build the trust of actors. It is time consuming process with the combination of different approaches. Different meetings and workshops can be arranged to discuss common interests. As a way to take practical steps to develop the trust, the federal government must address the grievances of smaller provinces especially their concern regarding the displacement of the people. And, at the same time, ethno-regional political parties should stop baseless propaganda against the project by realizing that the country is already passing through severe electricity crisis. In addition to this, there is a need to reactivate the CCI which has been almost inactive since the last decade. The functioning of IRSA must be improved and the Water Accord 1991 should be implemented in its true spirit. During the implementation of these positive steps, help from professional facilitators could also be sought in order to keep the interaction process smooth and in right direction. Otherwise, the continuously deteriorating interprovincial relations due to water dispute may increase to alarming proportions in the near future, if all the stakeholders are unable to reach any consensus on the issue of the KBD project.

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